

## **REMARKS**

In the Official Action, Claims 5, 6, 8 and 19 were indicated as allowed (See page 1 of the Official Action). Claims 3 and 4 are not rejected but merely objected to as dependent upon a rejected base claim. Applicants gratefully acknowledge the indication of allowable subject matter.

Claims 1, 2, 7 and 11-18 are rejected based upon a new reference. Claims 9 and 10 have been rejected as being indefinite. It is respectfully submitted that Claims 1, 2, 7 and 11-18, are patentable over the references cited in the Official Action. In particular, none of the cited references teach or reasonably suggest a radiation-sensitive resin composition comprising a resin as set forth in Claims 1 or 2. Similarly, Claims 9 and 10, as amended, are also patentable as containing no indefinite limitation.

### **Rejection under 35 U.S.C. § 112, Second Paragraph**

The rejection of Claims 9 and 10 under 35 U.S.C. § 112, second paragraph is addressed by the claim amendments above. Reconsideration and withdrawal of the rejection is respectfully requested.

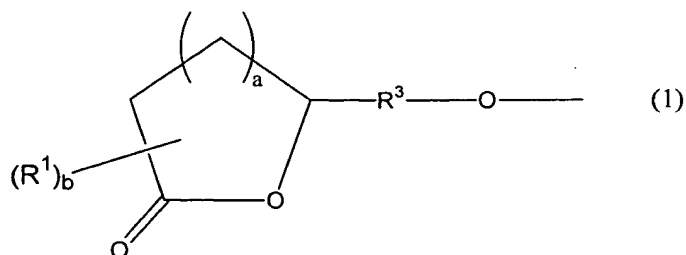
### **Rejections under 35 U.S.C. § 103**

Claims 1, 2, 7, 11-14, 16-18 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable based solely on U.S. Patent Application Publication No. US 2002/0098440 A1 for Application Serial No. 09/492,848 filed January 27, 2000 to Sato et al. This rejection appears on pages 2-4 of the Official Action. Claim 15 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable based on Sato et al. combined with U. S. Patent No. 6,265,131 to Chang, et al. This rejection appears on pages 4-5 of the Official Action.

It is respectfully submitted that each of the above art rejections is erroneously based upon the disclosure of Sato et al. as cited in the Official Action. In the Official Action, it is alleged

that Sato et al. discloses polymer lactone structures meeting the formula required in Claims 1 and 2. However, none of the cited disclosures support this contention.

The lactone structures required in both Claims 1 and 2 require that the ester oxygen falling within and forming the lactone ring in the polymer group be immediately vicinal to the carbon atom providing linkage of the lactone ring to the hydrocarbon group  $R^3$ . This relationship is demonstrated in structure 1 from Claim 1 as follows:



This same structural relationship is included in structure 2 in Claim 2. All the rejected Claims depend from Claims 1 or 2.

None of the structures cited from Sato et al., or throughout that disclosure teach or adequately suggest a structure meeting the aforementioned relationship included in Claims 1 or 2. The lactone structures disclosed in Sato et al. are limited to five-member lactone rings wherein only carbon atoms are immediately vicinal to a lactone carbon atom forming a linkage to the base polymer.

None of the cited references teach or reasonably suggest a resin composition as set forth in Claim 1 or 2. Further, each of Claims 7 and 11-18 depend from Claims 1 or 2 and are therefore patentable over the cited references for at least the reasons set forth above with respect to Claim 1 and 2. Accordingly, reconsideration and withdrawal of the obviousness rejections is respectfully requested.

## **Claim Objection**

Upon withdrawal of the underlying rejections, Claims 3 and 4 will no longer depend from a rejected base claim. Reconsideration and withdrawal of the claim objection is respectfully requested.

## **CONCLUSION**

All rejections and objections having been addressed by the present amendments and response, Applicants submit that the present case is in condition for allowance and respectfully request early notice to that effect. If any issues remain to be addressed in this matter which might be resolved by discussion, the Examiner is respectfully requested to call Applicants' undersigned counsel at the number indicated below.

Respectfully submitted,

PIPER RUDNICK LLP



---

Steven B. Kelber  
Registration No. 30,073  
Attorney of Record

1200 Nineteenth Street, N.W.  
Washington, D.C. 20036-2412  
Telephone No. (202) 861-3900  
Facsimile No. (202) 223-2085

Patrick R. Delaney  
Registration No. 45,338

SERIAL NO. 09/874,977

DOCKET NO.: 5988-031-27

**MARKED-UP COPY OF AMENDED CLAIMS**

9. (Amended) The radiation-sensitive resin composition according to [claim 2] Claim 4, wherein the total of the content of the recurring units of the formulas (8) to (10) in the resin of component (A) is 5-70 mol%.

10. (Amended) The radiation-sensitive resin composition according to [claim 5] Claim 6, wherein the total of the content of the recurring units of the formulas (8) to (10) in the resin of component (A) is 5-70 mol%.